

C3 of meat and the layer with solubilized proteins a temporary pH decrease is brought about of 1 to 2.

REMARKS

The specification stands objected to under 37 CFR 1.75(d)(1) and MPEP § 680.01(o) for failure to provide antecedent basis for the claimed subject matter. The Examiner requested that the specification be corrected to mention combining several methods of forming a coherent piece meat, i.e., using acids and heat or acids and forcemeat. Having canceled claims 5, 6, 13, 21 and 22, the claims no longer recite methods of treating meat using acids and heat. The specification at page 4, lines 8-11, discloses the use of forcemeat with either form of selected denaturation (using acids or heat). No amendment to the specification is believed needed in this regard. The Examiner also requested that the specification provide antecedent basis for both tumbling and massaging the meat as set forth in claim 7. Page 5 has been amended accordingly. No new matter has been added by this amendment.

Claim 12 stands objected to for use of the informal phrase "common salt". Claim 12 has been amended to recite "sodium chloride" in accordance with the Examiner's suggestion.

Claims 3, 4, 6, 8, 13-17, 19 and 20-22 stand rejected under 35 U.S.C. § 112, second paragraph, for indefiniteness for the reasons set forth in numbered paragraphs 5-12 of the Office Action. Each of these matters is addressed in turn.

¶5: Improper dependency. Claims 3, 4, 19 and 20, which originally depended from claim 2, have been amended to depend from claim 1.

¶6: Antecedent basis. Claim 3 has been amended to specify "interfaces" instead of "the interface" to avoid the need for antecedent basis in claim 1. The Examiner did not object to 19 and 20, yet these claims have likewise been amended.

¶7: Indefiniteness of "taste". Claim 4 has been amended to delete the reference to the taste of the meat.

¶8: Indefiniteness. Claim 6 has been canceled and the rejection thereof is now moot.

¶9: Indefiniteness of "massaging". Claim 8 has been amended to refer only to the tumbling step recited in claim 7. The step of massaging in a rotating drum has been deleted from claim 8.

¶10: Indefiniteness of temperatures. Claim 13 has been canceled and the rejection thereof is now moot.

¶11: Indefiniteness of denaturing and coagulating step. Claims 5, 21 and 22 have been canceled and the rejection thereof is now moot. With respect to claim 14, Applicant points out that claim 1 specifically includes a step of "selectively denaturing and coagulating the solubilized proteins". This provides the step referred to in claim 14. No amendment of claim 14 is believed necessary.

¶12: Indefiniteness of "texture". Claim 17 has been amended to delete the recitation of "the texture of thinly cut red meat".

Claims 1, 3-7 and 9-22 stand rejected under 35 U.S.C. § 103(a) for obviousness over U.S. Patent No. 3,740,235 to Weiner in view of an English language abstract of German Patent No. 1,692,110 to Bauer et al. Claim 8 stands rejected under 35 U.S.C. § 103(a) for obviousness over the Weiner patent in view of the abstract of the Bauer et al. patent and further in view of U.S. Patent No. 4,517,888 to Gould. Applicant respectfully traverses these rejections for the following reasons.

The present invention provides a method for manufacturing a coherent piece of raw meat from smaller pieces of raw meat. According to the method, the smaller pieces of meat are treated with one or more edible salts to form a layer of solubilized proteins on the surface of the smaller pieces of meat. The pieces of meat are held against each other to form a coherent piece of meat. The solubilized proteins at the interfaces of the pieces of meat are selectively denatured and coagulated by decreasing the pH between the smaller pieces of meat. In essence, this is a two-phase process where the interfaces are denatured and coagulated but the bulk of the raw meat is unchanged. In this manner, the smaller pieces of meat join together but retain their properties of unprocessed raw meat because the proteins of the smaller pieces of meat are not denatured.

The preamble of claim 1 has been amended to clarify that the inventive method relates to processing of raw meat, which remains raw following the processing. This feature was present in claim 1 when filed at line 10 ("unprocessed raw

meat"). No new matter has been added nor has the scope of the claim been changed.

As recognized by the Examiner, the Weiner patent teaches a method of forming a beef loaf with a binding agent but does not suggest that the binding agent can include an acid. To overcome this deficiency in the teachings of the Weiner patent, the Examiner has relied upon an English language abstract of the German Bauer et al. patent.

Enclosed for the Examiner's reference is a copy of the front page and the page containing the claims of the original Bauer et al. application. A Form PTO-1449 is also enclosed for execution by the Examiner to formally indicate his consideration of this reference. Only these pages were available from the German Patent Office because the full document is no longer suitable for reproduction by photocopying. (Pursuant to the notice in the box on the lower part of the front page of the patent application, this is according to a decision of the President of the German Patent Office dated April 28, 1970.) Both the English language abstract and the claims of the German patent indicate that the patent relates only to the use of acids as additives to an emulsion in the production of sausages.

An emulsion for the production of sausages is quite unlike a collection of smaller pieces of raw meat for production of a coherent piece of raw meat. A sausage emulsion is not a large quantity of separate meat pieces. Moreover, the method disclosed in the abstract of the Bauer et al. patent requires heating, hence, the sausage meat is not raw.

In contrast, the present invention uses a large number of small pieces of meat which are still raw. This is distinct from the teachings of the abstract of the Bauer et al. patent where the sausage emulsion is subjected to a heating treatment. Additionally, the Bauer et al. patent relates only to the production of emulsion and not the use of solubilized proteins to emulsify fats or other materials in the interfaces between these smaller pieces of meat. Hence, the Bauer et al. patent does not teach the use of a two-phase process as occurs when the claimed method is practiced.


The use of acid as an agent for binding together pieces of raw meat is critical to the present invention and is not taught or suggested by the combined prior art of record. One skilled in the art, upon consulting the Weiner patent, would not consider the teachings of the Bauer et al. patent to be appropriately combined therewith. Sausage processing and forming a coherent piece of meat are very different operations. The Bauer et al. patent teaches only the use of acids in combination with a sausage emulsion. A sausage emulsion does not have the character of small pieces of raw meat. The Bauer et al. patent does not suggest adding acid to the heated sausage emulsion to somehow "glue" together pieces of raw meat. The simple teaching of an acid additive in a sausage emulsion provides no motivation to include an acid in a composition of small pieces of raw meat. Accordingly, the teachings thereof regarding processing heated sausage emulsions are not combinable with the teachings of the Weiner patent and claims 1, 3, 4, 7, 9-12 and 14-20 are believed to be free of the cited prior art.

The Gould patent is relied upon solely for its disclosure of an apparatus which kneads food in a rotary drum. Claim 8 is believed to be patentable over the cited prior art for the same reasons that pending claims 1, 3, 4, 7, 9-12 and 14-20 are patentable.

Reconsideration of the rejections and allowance of claims 1, 3, 4, 7-12 and 14-20 are respectfully requested.

Respectfully submitted,

WEBB ZIESENHEIM BRUENING LOGSDON
ORKIN & HANSON, P.C.

BY 
Richard L. Byrne
Registration No. 28,498
Attorney for Applicant
700 Koppers Building
436 Seventh Avenue
Pittsburgh, PA 15219-1818
Telephone: (412) 471-8815
Facsimile: (412) 471-4094